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ABSTRACT

The concept of autonomy in second language learning is explored by tracing some steps in the evolution of theory and practice. The first section relates one definition of learner autonomy ("the ability to take charge of one's learning") to self-instruction in language learning and to research in language learning at the adult level. The second section describes a successful attempt to promote autonomous learning in a secondary school classroom and subsequent developments in theory. The third section then elaborates a theory of learner autonomy designed to apply differently to these two very different kinds of language learning, incorporating the notions of action knowledge, zone of proximal development, and other principles of child development. The fourth describes a current application of the theory to language learning projects at the Centre for Language and Communication Studies at Trinity College (Dublin, Ireland), and a concluding section suggests how the theory of learner autonomy might be further explored and elaborated. Contains 16 references. (Author/MSE)

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Learner Autonomy: Some Steps in the Evolution of Theory and Practice¹

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Abstract

This article explores the concept of autonomy in second language learning by tracing some steps in the evolution of theory and practice. The first section relates Holec's (1979/1981) definition of learner autonomy to self-instruction in language learning, while the second section describes a successful attempt to promote autonomous learning in a school classroom. The third section then elaborates a theory of learner autonomy designed to apply equally to these two very different kinds of language learning. The fourth section describes how we are currently attempting to apply the theory to language learning projects in the Centre for Language and Communication Studies (CLCS), Trinity College, Dublin. Finally, the conclusion briefly suggests how the theory of learner autonomy might be further explored and elaborated.

Learner autonomy and self-instruction

In the report that he prepared for the Council of Europe under the title *Autonomy and foreign language learning*, Holec (1981: 3) defines learner autonomy as "the ability to take charge of one's learning", which means to have, and to hold, the responsibility for all the decisions concerning all aspects of this learning, i.e.:

- *determining the objectives;*
- *defining the contents and progressions;*
- *selecting methods and techniques to be used;*
- *monitoring the procedure of acquisition properly speaking (rhythm, time, place, etc.);*
- *evaluating what has been acquired.*

This definition owes much to the work on adult education that the Council of Europe promoted in the 1970s; it also corresponds closely to the traditional image of the university student as someone capable of a high degree of self-direction in his or her learning. The terms in which it is

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couched seem to imply self-instruction and can easily encourage the view that learner autonomy is essentially a matter of learner maturity.

This interpretation of learner autonomy helped to shape the self-instructional German course that CLCS launched for students of Engineering in 1982. The course was extra-curricular and spanned two academic years. We knew from experience that students were not automatically autonomous in their learning, so besides self-instructional learning materials that they could use in our self-access centre, we provided them with an advisory service. We encouraged them to meet the advisor on a regular basis, either individually or in small groups, in order to discuss with her any problems they might be having with their learning; and the advisor did her best to engage them in processes of negotiation that would help them to accept responsibility for their learning.

There is no doubt that during the two-year research phase of this scheme the participating students learnt a lot of German; and there is no doubt either that for most of them the advisory service played an important role (for a full account of this research phase, see Little and Grant 1986). But it was clear to us that learning a language by individual self-instruction was a difficult undertaking, not only for motivational reasons but because self-instruction could not provide learners with the interaction and feedback that are inescapable features of classroom learning. Accordingly, from an early stage we gave our self-instructional learners the opportunity to take part in regular practice sessions with native speakers of German (mostly German students spending a term or a year at Trinity College). But despite this concession to interactivity, we still thought of the language learner as "a lone organism" (Bruner 1985: 25) whose success or failure was likely to depend on his or her maturity as a learner. That this was at best a partial view was made clear when we encountered autonomy as a reality of classroom language learning.

Learner autonomy in the classroom

Towards the end of the 1970s language teachers in Ireland as in other European countries became interested in communicative approaches to foreign language teaching. From 1979 Institiúid Teangeolaíochta Éireann provided a meeting place and administrative support for a group of language teachers who set out to explore the implications of these new approaches for foreign language teaching in Irish second-level schools. The ITÉ Modern Languages Project drew up guidelines for the elaboration of communicative syllabuses, developed communicative language teaching materials in French, German, Spanish and Italian, and provided

regular in-service seminars for language teachers. In 1984 one of these seminars was given by Leni Dam, a Danish teacher of English.

Leni Dam's project was to foster the development of autonomy in Danish teenage learners of English. In her recently published book she explains her decision to go down this path as follows:

In the mid 1970s I started for the first time to work with pupils of 14–16 years in unstreamed language classes. I was up against the tired-of-school attitude that this age group often displays, as well as a general lack of interest in English as a school subject. In order to survive I felt I had to change my usual teacher role. I tried to involve the pupils – or rather I forced them to be involved – in the decisions concerning, for example, the choice of classroom activities and learning materials. I soon realized that giving the learners a share of responsibility for planning and conducting teaching-learning activities caused them to be actively involved and led to better learning. It also increased their capacity to evaluate the learning process. In this way a virtuous circle was created: awareness of HOW to learn facilitates and influences WHAT is being learned and gives an improved insight into HOW to learn. (Dam 1995: 2)

Dam derived much of her initial inspiration from Douglas Barnes's book *From communication to curriculum* (1976). As its title suggests, this book explores the importance of communication for successful classroom learning, arguing that traditional modes of classroom organization generate forms of discourse that tend to suppress rather than stimulate the natural curiosity and interest on which learning depends. In the talk she gave to the ITÉ Modern Languages Project, Dam explained in detail how she made her learners confront the issue of their own interest and motivation, and how she required them to devise their own learning activities, find their own learning materials, keep a record of their learning in journals, and engage in regular evaluation of their own and others' progress. The account she gave of her pupils' projects and the samples she passed round of their work showed that learner autonomy could be a powerful reality in the classroom. But this autonomy was a very different phenomenon from the autonomy we had been trying to promote among self-instructional learners of German.

The ITÉ Modern Languages Project was in the vanguard of European development. Judged by what were then mainstream communicative criteria, *Salut!*, the three-year French course produced by the project, was as good as any. It concentrated from the beginning on encouraging learners to use French; it took very full account of their likely out-of-

school interests and preoccupations; and it encouraged them to engage in various out-of-class activities likely to help consolidate their learning. But Leni Dam's talk was a salutary reminder that any course book is only as good as the interaction that converts it into a learning process. That was not all, however: her project demonstrated that if the interaction is right, there is no need for a course book in the first place. And in terms of communicative orthodoxy worse was to come: required to devise their own learning activities, Dam's pupils often gave themselves tasks that had been banned from orthodox communicative classrooms. It seemed somehow scandalous that pupils who spent so much of their time translating from Danish into English could perform so creditably in spoken English, even in their first year of learning. Again the conclusion was forced on us that it is not the task itself that determines learning success, but the kind and quality of the interaction in which it is embedded.

Leni Dam's 1984 seminar effectively undermined my two working assumptions about learner autonomy: first, that it was something likely to be achieved only by older and in that sense mature learners; and second, that it was achieved by individual learners operating as "lone organisms". Leni Dam's project demonstrated that young teenagers can show great maturity in matters of learning, and her experience implied that in principle there are no age-related barriers to learner autonomy. She also showed that in classrooms learner autonomy grows out of collaboration, so that acceptance of responsibility for one's own learning entails sharing responsibility for the learning of others.

Dam's practical demonstration of the essential paradox of learner autonomy in the classroom – that the development of a capacity for independent thought and action arises most effectively from pedagogical processes that emphasize interdependence and collaboration in learning – suggested the need for a theory of learner autonomy based on the resolution of that paradox.

The search for theoretical foundations

Arguments in favour of learner-centred pedagogies have often emphasized the gulf that easily separates developmental and experiential learning, at which human beings are notoriously good, from learning that takes place in the formal context of schooling, where success is by no means guaranteed. Barnes, for example, draws a crucial distinction between "school knowledge" and "action knowledge":

School knowledge is the knowledge which someone else presents to us. We partly grasp it, enough to answer the teacher's questions, to do exercises, or to answer examination questions, but it remains someone else's knowledge, not ours. If we never use this knowledge we probably forget it. In so far as we use knowledge for our own purposes however we begin to incorporate it into our view of the world, and to use parts of it to cope with the exigencies of living. Once the knowledge becomes incorporated into that view of the world on which our actions are based I would say that it has become "action knowledge". (Barnes 1976: 81)

According to this view developmental learning – otherwise, the early growth of "action knowledge" – should play a central role in any theory of learner autonomy. After all, the outcome of developmental learning is autonomy, in the sense that it enables the child to operate independently across a range of domestic and social contexts. However, the growth of this autonomy, whether in speech or in behaviour generally, requires not only the constant stimulus of interaction with others, but also guidance and supervision. Children acquire their mother tongue by gradually reconstructing its forms from the input they receive from "expert" speakers; and it is clear that this process is largely resistant to interference from outside – children get their verb endings right, for example, when they are developmentally ready to do so, and not when their parents decide they should. But this fact must not mislead us into supposing that developmental learning is entirely free of quasi-pedagogical control. On the contrary, as Premack has observed (1984: 33; cit. Moll 1990: 1), the *"presence of pedagogy in human affairs introduces a cognitive gap that is not found in other animals. If the adult does not take the child in tow, making him the object of pedagogy, the child will never become an adult (in competence)"*.

The implication of Barnes's distinction between "school knowledge" and "action knowledge" seems to be that we can overcome the problems of schooling by organizing our classrooms in such a way that they automatically encourage the kinds of discourse that by now are well understood to foster developmental learning. I believe this is true, as far as it goes. But we must be careful not to overlook two important facts. First, child-rearing practices differ greatly from one society to another, and with them the discourse structures by which developmental learning is mediated. Second, some parents, siblings and caregivers are better teachers than others, both in an absolute sense and in relation to the norms and expectations of the society of which they are members. For example, in a longitudinal study of mother tongue development in a group of English children, Wells found that the value attached to literacy in the

child's early experience is a strong indicator of subsequent educational success (1981: 259); and he also found that the best predictor of attainment in literacy is the "extent of children's own understanding of the purposes and mechanics of literacy" when they start school (ibid.: 263).

If we are to derive our notion of what constitutes best pedagogical practice from the interactional structures that mediate developmental learning, then, we must not only take account of differences in child-rearing practice from one society to another: we must also identify what it is in child-"expert" interaction that enables the child to achieve autonomy in task performance. An approach to child development that helps us to do this is the one inspired by the work of the Soviet psychologist Vygotsky. Vygotsky insisted on the importance of the social factor in learning, but not in the superficial sense that most learning goes on within a framework of social interaction. He claimed that our higher psychological functions are internalized from social interaction:

Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category and then within the child as an intrapsychological category. (Vygotsky 1981: 163; cit. Wertsch 1985: 11)

Vygotsky developed his theory of the "zone of proximal development" in order to explain how we arrange the environment so as to make it possible for the child to progress from one level of development to the next. He defined the "zone of proximal development" as the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky 1978: 86)

So what is it that enables the child to become autonomous in the performance of a particular task? Certainly, he or she must have passed successfully through the "zone of proximal development". But Vygotsky's insistence on the interactive nature of learning leads us to expect that the parent, sibling or caregiver also has a crucial role to play. And sure enough, Díaz, Neal and Amaya-Williams (1990: 151), in an exploration of the social origins of self-regulation, found that "*the relinquishing factor, as a true index of maternal sensitive withdrawal during the teaching task, was significant and positively correlated to the child's takeover of the regulatory role*". In other words, the most skilful parent, sibling or

caregiver is the one who knows exactly when to hand over control to the developing child.

Bruner provides an illustration of how this process can be transferred to more formal pedagogical contexts in the following description of the effective tutoring of young children:

To begin with, it was [the tutor] who controlled the focus of attention. It was she who, by slow and often dramatized presentation, demonstrated the task to be possible. She was the one with a monopoly on foresight. She kept the segments of the task on which the child worked to a size and complexity appropriate to the child's powers. She set things up in such a way that the child could *recognize* a solution and perform it later even though the child could neither do it on his own nor follow the solution when it was simply *told* to him. In this respect, she made capital out of the "zone" that exists between what people can recognize or comprehend when present before them, and what they can generate on their own [...]. In general what the tutor *did* was what the child could *not* do. For the rest, she made things such that the child could do *with* her what he plainly could not do *without* her. And as the tutoring proceeded, the child took over from her parts of the task that he was not able to do at first but, with mastery, became consciously able to do under his own control. And she gladly handed these over. (Bruner 1986: 75f.)

Note that in this account the gradual handing over of control to the learner – in other words, the deliberate fostering of learner autonomy – is not an option that the tutor may or may not adopt according to ideological preference: it is essential to the success of the tutoring process. Note also that the handing over of control to the learner is more than a psychological phenomenon. In order to gain the psychological benefits of successful learning, the learner must gradually assume control of the social interaction that gives outward form and substance to the learning process.

Tharp and Gallimore (1988) provide a full account of the theoretical foundation and practical application of a pedagogy derived from the Vygótskyan model of child development and closely related to the pedagogy described by Bruner. In their project, primary school classes were divided into groups of five or six learners, which rotated around a number of different activity centres, one of which was controlled by the teacher. This procedure had two closely related benefits: it allowed the teacher to interact in a focussed, concentrated and appropriately supportive way with five or six learners at a time, and it required those learners who were not working with the teacher to discover how to conduct learning

conversations among themselves, supporting one another in the "zone of proximal development".

So far I have been concerned with learning in general. I conclude this part of the article by briefly addressing the particular case of second language learning. There is by now a large body of research focussed on the processes of language learning, on the basis of which it is possible to make the following two generalizations:

1. Proficiency in the spontaneous oral use of a second or foreign language is developed by practice: we learn to speak our target language by speaking it. Assuming that spontaneous oral proficiency is part of what our learners are aiming at, we should do our best to ensure that they have every opportunity to speak their target language. The essential first step in this direction is to make the target language the usual medium of classroom communication. The pedagogy elaborated and explored by Tharp and Gallimore and the closely similar pedagogy practised by Leni Dam (see Dam 1995) are very precisely calculated to serve this purpose, since they assign a central role to collaborative work in small groups, where learning can proceed only via communication.

On the other hand, language teaching in formal educational contexts has always used processes of explicit linguistic analysis as a means of compensating for the limited exposure that learners have to the target language. One of the chief products of linguistic analysis is, of course, conscious metalinguistic knowledge; and it is clear that conscious metalinguistic knowledge can support both the development of proficiency (for example, in the systematic learning of vocabulary) and target language use (for example, in the analysis of grammatical forms as an aid to reading comprehension, or the intentional deployment of various strategies in the performance of non-immediate communicative tasks).

2. The first of these generalizations tends to emphasize the social dimension of language learning, while the second tends to emphasize the psychological dimension – in pedagogical practice, of course, the two dimensions constantly interact with one another, so that it is often difficult to maintain a clear distinction between them. In order to complete the Vygotskian picture, however, we need a third generalization.

3. The goal of all learning is that the learner should acquire knowledge and/or skills that he or she can deploy independently of the immediate context of learning. In other words, the true measure of success in learning of any kind is the extent to which the learner achieves autonomy. But what exactly is the complex of knowledge and skills that a successful language learner should be able to deploy? Taken together, my first two generalizations claim that language learning depends on the interaction of language use and linguistic analysis. Equally, however, language use – especially second language use – depends on the capacity for further learning; for it is on the basis of such a capacity that the language user is able to cope with unfamiliar situations and new discourse types. Thus we must always think of learner autonomy in relation both to learning and using the target language. If the teacher's task is to support learners in the "zone of proximal development", at every stage of the learning process we must think of the zone – and the gradual relinquishing of control to the learner – simultaneously and equally in terms of the skills and knowledge that underpin language learning and the skills and knowledge that underpin language use.

From theory to practice

I turn now to the recent application of these theoretical considerations to CLCS's practical involvement in language teaching and learning. I shall refer first to the two-year modules in French (non-beginners) and German (beginners and non-beginners) that we provide for students who are not taking a foreign language as part of their degree course, and then to our project to develop interactive video programs for use in self-access language learning.

The design of the French and German modules was shaped by one consideration above all: if when they had completed the modules our students were not able to use French or German for a range of communicative purposes corresponding to their personal (including academic and/or vocational) needs, they would have wasted their time. Communicative autonomy in the real world must be our overriding goal. Accordingly, we decided that the beginners' modules in German would begin by focussing on the practical demands of survival in a German-speaking environment, such as basic greetings and social interactions, travel, obtaining food and drink, and finding accommodation, and would gradually progress towards dealing with bureaucracy and taking an interest in cultural issues and current affairs. And we decided that the non-beginners' modules in French and German would move through three phases: (i) consolidation of basic communicative skills for everyday

survival and social needs; (ii) refinement of expressive and interactive skills for effective involvement in social and study environments abroad; and (iii) development of spoken and written discursive skills and extended listening skills for the purposes of study abroad.

What pedagogical measures are most likely to help our students to become autonomous users of their target language? Our answer to this question has been constrained by two factors. First, each module is assigned only one two-hour session per week, which means that contact time between teachers and learners is strictly limited. Second, because our budget is not large, each module is open to a maximum of forty students, which means that the possibility of interaction between teachers and small groups of learners is also strictly limited.

These constraints have led us to pursue the development of learner autonomy in two largely unrelated ways. On the one hand, at the beginning of each module we spend a session talking to participants about the process of language learning and suggesting a number of practical measures that they might adopt in order to take control of their learning. On the other hand, we insist that French or German is the medium of all classroom communication, and the teachers are supported by teams of French- and German-speaking ERASMUS students: in each weekly session the learners spend half an hour working in groups of three or four with a native-speaker assistant. The purpose of this group work is to prepare interactive group oral presentations for assessment at the end of the year, and for much of the academic year it forms the core of the weekly sessions. Without necessarily reflecting on the fact, learners quickly find that they have to develop a high degree of autonomy as users of their target language if they are to participate fully in the work of their group; and the fact that the groups prepare presentations for assessment at the end of the module means that in order to succeed in the exams, students must support one another in the learning process.

Clearly, if students are to derive maximum benefit from the language modules they must spend more time on their language learning than the weekly two-hour sessions. The group work that leads to interactive group presentations in itself ensures that they collaborate with one another outside the weekly sessions. In addition, they are encouraged to use CLCS's self-access language learning facilities – language laboratory, video, satellite television, and a computer network with CD-ROM. I believe it is in the further elaboration of self-access support for the modules that we can make most progress towards the more effective

development of autonomy in our learners. I can best illustrate this by referring to our work in interactive video.

The first version of the Autotutor, CLCS's interactive video cassette system, was designed and implemented over ten years ago (see Little and Davis 1986). Video was at that time a relatively new resource, and we were looking for ways of making it available to self-access learners. One option was to prepare worksheets that would provide learners with a viewing focus, comprehension exercises, and background information. An alternative was to link the videocassette player to a computer and replace the worksheets by a simple computer program. That, in essence, was what the Autotutor was designed to do.

From the beginning, however, we were compelled to recognize a potential conflict between what we could achieve with the Autotutor and our interest in promoting learner autonomy. This potential conflict is best described in discourse terms. I referred earlier to Barnes's (1976) argument that whereas learning is the product of communication, traditional modes of classroom organization generate forms of discourse that tend to suppress rather than stimulate the natural curiosity and interest on which learning depends. Specifically, traditional classroom discourse ensures that the initiative always lies with the teacher, and that learners are limited to a responding role (see Sinclair and Coulthard 1975). The same structure inescapably characterizes instructional computer programs: the computer (more accurately, of course, the teacher-programmer) takes the initiative and the learner must respond. What is more, unintelligent programs are capable of only very limited flexibility in the way they handle learner responses; in this they compare very unfavourably with even the most traditional and authoritarian human teachers.

In our earliest work with the Autotutor we tried to design our programs so as to give learners genuine choices, for example, in the order in which they performed exercises; and we also tried to structure exercises so as to encourage reflection on the part of the learner. The original version of the Autotutor was based on the Acorn BBC computer, which by the late 1980s was obsolete. This led us to develop a second version, Autotutor II, based on the PC. By the time we were in a position to implement this second version we were convinced of the importance of interaction and collaboration in the development of learner autonomy. Accordingly, we undertook a number of pilot projects designed to explore the use of Autotutor II as a stimulus for group work in self-access (for a fuller account of this work, see Little 1994). Programs followed much the same structure as before, but now they contained screens addressed to the group

of learners and calculated to help them embed the running of the Autotutor program in a larger learning conversation (for more details, again see Little 1994). A number of pilot projects have produced highly encouraging results, so we are now embarking on the development of Autotutor programs as fully integrated self-access components of our foreign language modules. Our intention is to write programs that will facilitate target language interaction among three or four learners at a time, but will simultaneously encourage the adoption of an analytical perspective on both the content and structure of the individual Autotutor program and the larger language learning process. In this way we hope to take the first steps towards fostering learner autonomy via group work in self-access. In principle, of course, the same techniques can be applied to the use of audio and video in their own right as well as to other computer programs, so that whatever success we have with our Autotutor programs will be transferrable to other self-access facilities.

Conclusion: the never ending interaction between theory and practice

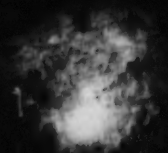
In this article I have tried to show how an essentially practical interest in learner autonomy generated the urge to explore theoretical perspectives, which in turn have provided tools with which to shape further pedagogical practice. The process is, of course, never ending. CLCS's pursuit of learner autonomy within the framework of our foreign language modules requires empirical investigation, and the results of that investigation will lead to further elaboration, and perhaps modification, of our theoretical position. Our immediate research agenda is already implied in what I have said about the next stage of the Autotutor project. We have derived detailed program design criteria from the three generalizations with which I concluded the theoretical part of this article; we shall write programs that explicitly combine language use (target language interaction) with language learning (the analytical, metalinguistic dimension); we shall make video recordings of learners working with these programs and invite them to introspect on the recordings; and we shall analyse these research data from various points of view. In this way we hope to gain information that will enable us to improve the design of future Autotutor programs, find analogous ways of exploiting our other self-access facilities, bring us to a better understanding of the nature of "learning conversations" (Tharp and Gallimore 1988), and perhaps even suggest procedures for the conduct of language classes and the management of classroom discourse.

¹ This article is an extended and more formal version of the talk I gave at the 1995 Annual General Meeting of IRAAL.

References

- Barnes, D. (1976). *From communication to curriculum*. Harmondsworth, Penguin.
- Bruner, J. (1985). Vygotsky: a historical and conceptual perspective. In J. V. Wertsch (ed.), *Culture, communication, and cognition: Vygotskian perspectives*, Cambridge, Cambridge University Press, 21-34.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, Mass., & London, Harvard University Press.
- Dam, L. (1995). *Learner autonomy 3: from theory to classroom practice*. Dublin, Authentik.
- Diáz, R. M., Neal, C. J., & Amaya-Williams, M. (1990). The social origins of self-regulation. In L. C. Moll (ed.), *Vygotsky and education. Instructional implications and applications of sociohistorical psychology*, Cambridge, Cambridge University Press, 127-154.
- Holec, H. (1981). *Autonomy and foreign language learning*. Oxford, Pergamon. First published 1979, Strasbourg, Council of Europe.
- Little, D. (1994). Interactive videocassette for self-access: a preliminary report on the implementation of Autotutor II. *Computers and education* 23(1/2), 165-170.
- Little, D. & Davis, E. (1986). Interactive video for language learning: the Autotutor. *System* 14, 29-34.
- Little, D. G. & Grant, A. J. (1986). Learning German without a teacher. Report on a self-instructional programme for undergraduate students of Engineering Science at Trinity College, Dublin, 1982-1984. CLCS Occasional Paper No.14. Dublin, Trinity College, Centre for Language and Communication Studies.
- Moll, L. C. (1990). Introduction. In L. C. Moll (ed.), *Vygotsky and education. Instructional implications and applications of sociohistorical psychology*, Cambridge, Cambridge University Press, 1-27.
- Sinclair, J. McH. & Coulthard, M. (1975). *Towards an analysis of discourse*. Oxford, Oxford University Press.
- Tharp, R. G. & Gallimore, R. (1988). *Rousing minds to life. Teaching, learning, and schooling in social context*. Cambridge, Cambridge University Press.
- Vygotsky, L. (1978). *Mind in society*. Cambridge, Mass., Harvard University Press.
- Vygotsky, L. (1981). The genesis of higher mental functions. In J. V. Wertsch (ed.), *The concept of activity in Soviet psychology*, Armonk, N.Y., Sharpe.
- Wells, G. (1981). *Learning through interaction: the study of language development*. Cambridge, Cambridge University Press.
- Wertsch, J. V. (ed.) (1985). *Culture, communication, and cognition: Vygotskian perspectives*. Cambridge, Cambridge University Press.

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